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CURRICULUM VITAE  
RICHARD NORMAN JONES

Departments of Psychiatry and Human  
Behavior and Neurology  
Warren Alpert Medical School  
Brown University  
Butler Hospital  
345 Blackstone Boulevard, Box G-BH  
Providence, Rhode Island 02906  
Work Phone: 401-444-1943  
Email: [rich\\_jones@brown.edu](mailto:rich_jones@brown.edu)

104 Plymouth Road  
Needham, MA 02492

Mobile Phone: 617-686-3724  
Email: [jones@lvmworkshop.org](mailto:jones@lvmworkshop.org)

EDUCATION

Undergraduate  
Graduate

The George Washington University, Psychology, BA, 1991  
Johns Hopkins University, School of Hygiene and Public  
Health, Psychiatric Epidemiology, Sc.D., 1998

ACADEMIC APPOINTMENTS

Associate Professor, and Director, Quantitative Science,  
Departments of Psychiatry and Human Behavior and  
Neurology, Warren Alpert Medical School, Brown  
University (2013-present)  
Associate Professor, Harvard Medical School (HMS), Beth  
Israel Deaconess Medical Center (BIDMC), Department of  
Medicine, Division of Gerontology, 2012-2013)  
Senior Scientist, Institute for Aging Research (IFAR), Hebrew  
SeniorLife (HSL), 2007-2013  
Assistant Professor, HMS/BIDMC, 2007-2012  
Instructor of Medicine, HMS/BIDMC, 2004-2007  
Associate Scientist, IFAR/HSL 2003-2007  
Senior Research Associate, 1997-2003

OTHER APPOINTMENTS

Major Administrative  
Leadership Positions

Associate Director, Health and Social Policy Research,  
HSL/IFAR 2004-present  
Director, Mental Health and Aging Research, HSL/IFAR, 2004-  
present

Committee Service

Faculty Committee, HSL/IFAR, Member 1997-present and

Chair 2003-2006  
 Training Committee, HSL/IFAR, Member 2001-2002  
 Orientation Committee, HSL/IFAR, Chair 2004  
 Directors Group, HSL/IFAR, 2004-2009  
 Institutional Review Board, HSL, Member 2006-present, Chair 2006-2008  
 Senior Faculty Council, HSL/IFAR, Member 2009-present, Chair 2011-2012

National and International Technical Expert Panel, Statistical Methods for Quality Initiatives, Center for Medicare and Medicaid Services Member 2005-2006,

Editorial Roles Assistant Editor, Biostatistics. Journal of the American Geriatrics Society, 2009-present  
 Statistical Editor, Alzheimer's & Dementia, 2013-present

Grant Review NIH/NIMH SRSP Review Group, Ad Hoc Member, 2007  
 NIH/NIH Program Project Special Emphasis Panel Scientific Review Group 2008 10 ZAG1 ZIJ-7(O1), Member, 2007-2008  
 NIH/CSR Challenge Grant Review, 2009  
 Academy of Finland, Panel 6, Health and Society, 2010  
 National Health and Medical Research Council (Australia), APP104510 (Project)  
 NIH/NIA Special Emphasis Panel Scientific 2011/08 ZAG ZIJ-2 (A1), Member, 2011-present

HONORS AND AWARDS

NIMH Traineeship in Psychiatric Epidemiology, Johns Hopkins University, Pre-doctoral T32 award, 1995-1998  
 Exceptional Reviewer, Medical Care, 2007  
 Exceptional Reviewer, Medical Care, 2008  
 Exceptional Reviewer, Medical Care, 2010  
 Excellence in Tutoring, Harvard Medical School, Clinical Epidemiology AC701 First year medical students. 2009  
 Top Reviewer Award, Journal of the American Geriatrics Society, 2011

MEMBERSHIP IN SOCIETIES

Gerontological Society of America, 1998-present  
 Founding member, *Measurement Statistics and Research Design (MSRD) Interest Group*, Chair 2002-2004  
 American Geriatrics Society, 2009-present

## PUBLICATIONS LIST

### ORIGINAL PUBLICATIONS IN PEER-REVIEWED JOURNALS

1. Gallo JJ, Schoen R, & **Jones RN**. Cognitive impairment and syndromal depression in estimates of active life expectancy: the 13-year follow-up of the Baltimore Epidemiologic Catchment Area sample. *Acta Psychiatrica Scandinavica*, 2000. 101(4): 265-73.
2. **Jones RN** & Gallo JJ. Dimensions of the Mini-Mental State Examination among community dwelling older adults. *Psychological Medicine*, 2000. 30(May): 605-18.
3. Kiely DK, Simon SE, **Jones RN**, & Morris JN. The protective effect of social engagement on mortality in long-term care. *Journal of the American Geriatrics Society*, 2000. 48: 1367-72.
4. Morris JN, Carpenter I, Berg K, & **Jones RN**. Outcome measures for use with home care clients. *Canadian Journal on Aging / La Revue canadienne du vieillissement*, 2000. 19(S2): 87-105.
5. **Jones RN** & Gallo JJ. Education bias in the Mini-Mental State Examination. *International Psychogeriatrics*, 2001. 13(3): 299-310.
6. Mahoney DMF, Tarlow B, **Jones RN**, Tennstedt S, & Kasten L. Factors affecting the use of a telephone-based intervention for caregivers for people with Alzheimer's disease. *Journal of Telemedicine and Telecare*, 2001. 7(3): 1-9.
7. **Jones RN** & Gallo JJ. Education and sex differences in the Mini Mental State Examination: Effects of differential item functioning. *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences*, 2002. 57B(6): P548-58.
8. Leveille SG, Bean J, Bandeen-Roche K, **Jones RN**, Hochberg M, & Guralnik JM. Musculoskeletal pain and risk for falls in older disabled women living in the community. *Journal of the American Geriatrics Society*, 2002. 50: 671-8.
9. Mahoney DF, Tarlow BJ, **Jones RN**, & Sandaire J. Effects of a multimedia project on users' knowledge about normal forgetting and serious memory loss. *Journal of the American Medical Informatics Association*, 2002. 9(4): 383-94.
10. Belle SH, Czaja SJ, Schulz R, Zhang S, Burgio LD, Gitlin LN, **Jones RN**, Mendelsohn AB, & Ory MG. Using a new taxonomy to combine the uncombinable: integrating results across diverse interventions. *Psychology and Aging*, 2003. 18(3): 396-405.
11. Fries BF, Morris JN, Aliaga P, & **Jones RN**. Risk adjusting outcome measures for post-acute care. *American Journal of Medical Quality*, 2003. 18(2): 66-72.
12. **Jones RN**. Racial bias in the assessment of cognitive functioning of older adults. *Aging & Mental Health*, 2003. 7(2): 83-102.
13. **Jones RN**, Marcantonio ER, Morris JN, & Lipsitz LA. Satisfaction with primary care providers of older adults living in senior housing. *Journal of the American Geriatrics Society*, 2003. 41(4): 582-3.

14. **Jones RN**, Marcantonio EM, & Rabinowitz T. Prevalence and correlates of recognized depression in U.S. nursing homes. *Journal of the American Geriatrics Society*, 2003. 51(10): 1404-9.
15. Kiely D. K., Bergmann M. A., Murphy K. M., **Jones RN**, Orav E. J., & Marcantonio E. R. Delirium among newly admitted postacute facility patients: prevalence, symptoms, and severity. *The Journals of Gerontology. Series A, Biological Sciences and Medical Sciences.*, 2003. 58(5): M441-5.
16. Mahoney DF, Tarlow BJ, & **Jones RN**. Effects of an automated telephone support system on caregiver burden and anxiety: Findings from the REACH for TLC Intervention Study. *Gerontologist*, 2003. 43(4): 556-67.
17. Mahoney DF, **Jones RN**, Coon DW , Mendelsohn AB , Gitlin LN, & Ory M. The Caregiver Vigilance Scale: Application and validation in the Resources for Enhancing Alzheimer's Caregiver Health (REACH) project. *American Journal of Alzheimer's Disease and Other Dementias*, 2003. 18(1): 39-48.
18. Marcantonio ER, Simon SE, Bergmann MA, **Jones RN**, Murphy KM, & Morris JN. Delirium symptoms in post-acute care: prevalent, persistent, and associated with poor functional recovery. *Journal of the American Geriatrics Society*, 2003. 51(1): 4-9.
19. Mor V, Angelelli J, **Jones RN**, Roy J, Moore T, & Morris JN. Inter-rater reliability of nursing home quality indicators in the US. *BMC Health Services Research*, 2003. 3(1): 20.
20. Hirdes JP, Fries BE, Morris JN, Ikegami N, Zimmerman D, Dalby D, Aliaga P, Hammer S, & **Jones RN**. Home Care Quality Indicators (HCQIs) Based on the MDS-HC. *The Gerontologist*, 2004. 44(5): 665-79.
21. **Jones RN** & Fonda Stephanie. Use of an IRT-based latent variable model to link different forms of the CES-D from the Health and Retirement Study. *Social Psychiatry and Psychiatric Epidemiology*, 2004. 39(10): 828-35.
22. Kiely D. K., Bergmann M. A., **Jones RN.**, Murphy K. M., Orav E. J., & Marcantonio E. R. Characteristics associated with delirium persistence among newly admitted post-acute facility patients. *Journals of Gerontology. Series A, Biological Sciences and Medical Sciences*, 2004. 59(4): M344-M9.
23. Morris JN, **Jones RN**, Fries BE, & Hirdes JP. Convergent validity of MDS-based performance quality indicators in post-acute care settings. *American Journal of Medical Quality*, 2004. 19(6): 242-7.
24. Bergmann MA., Murphy KM, Kiely DK, **Jones RN**, & Marcantonio ER. A model for management of delirious postacute care patients. *Journal of the American Geriatrics Society*, 2005. 53(10): 1817-25.
25. **Jones RN**, Allaire JC, McCoy KJM, Kleinman KP, Rebok GW, Malloy PF, Rosenberg AL, Morris JN, & Marsiske M. A growth curve model of learning acquisition among cognitively normal older adults. *Experimental Aging Research*, 2005. 31(3): 291-312.

26. Koehler M, Rabinowitz T, Hirdes JP, Stones M, Carpenter GI, Fries BE, Morris JN, & **Jones RN**. Measuring depression in nursing home residents with the MDS and GDS: an observational psychometric study. *BMC Geriatrics*, 2005. 5(1).
27. Kuo HK, **Jones RN**, Milberg WP, Tennstedt S, Talbot L, Morris JN, & Lipsitz LA. Effect of blood pressure and diabetes mellitus on cognitive and physical functions in older adults: A longitudinal analysis of the ACTIVE cohort. *Journal of the American Geriatrics Society*, 2005. 53(7): 1154-61.
28. Marcantonio ER, Kiely DK, Simon SE, Orav EJ, **Jones RN**, Murphy KM, & Bergmann MA. Outcomes of older people admitted to postacute facilities with delirium. *Journal of the American Geriatrics Society*, 2005. 53(6): 963-9.
29. Gallo WT, Bradley EH, Dubin JA, **Jones RN**, Falba TA, Teng KM, & Kasl SV. The persistence of depressive symptoms in older workers who experience involuntary job loss: Results from the Health and Retirement Survey. *J Gerontol: Psychol Sci Soc Sci*, 2006. 61: S221-S8.
30. Inouye SK, Zhang Y, Han L, Leo-Summers L, **Jones RN**, & Marcantonio ER. Recoverable cognitive dysfunction at hospital admission in older persons during acute illness *Journal of General Internal Medicine*, 2006. 21(12): 1276-81.
31. **Jones RN**. Identification of measurement differences between English and Spanish language versions of the Mini-Mental State Examination: Detecting differential item functioning using MIMIC modeling. *Medical Care*, 2006. 44(11 Suppl 3): S124-S33.
32. **Jones RN**, Yang FM, Zhang Y, Kiely DK, Marcantonio ER, & Inouye SK. Does educational attainment contribute to risk for delirium? A potential role for cognitive reserve. *J Gerontol A Biol Sci Med Sci*, 2006. 61A(12): 1307-11.
33. Kiely DK, **Jones RN**, Bergman MA, Orav EJ, & Marcantonio ER. Association between delirium resolution and functional recovery among newly admitted post-acute facility patients. *The Journals of Gerontology. Series A, Biological Sciences and Medical Sciences.*, 2006. 61A(2): 204-8.
34. Kiely DK, Volicer L, Teno J, **Jones RN**, Prigerson HG, & Mitchell SL. The validity and reliability of scales for the evaluation of end-of-life care in advanced dementia. *Alzheimer Disease and Associated Disorders*, 2006. 20(3): 176-81.
35. Kuo HK, **Jones RN**, Milberg WP, Tennstedt S, Talbot L, Morris JN, & Lipsitz LA. Cognitive function in normal-weight, overweight, and obese older adults: An analysis of the Advanced Cognitive Training for Independent and Vital Elderly cohort. *Journal of the American Geriatrics Society*, 2006. 54: 97-103.
36. Mitchell SL, Kiely DK, **Jones RN**, Prigerson H, Volicer L, & Teno JM. Advanced dementia research in the nursing home: the CASCADE study. *Alzheimer Disease and Associated Disorders*, 2006. 20(3): 166-75.
37. Simon SE, Bergmann MA, **Jones RN**, Murphy KM, Orav EJ, & Marcantonio ER. Reliability of a structured assessment for non-clinicians to detect delirium among new admissions to post-acute care. *Journal of the American Medical Directors' Association*, 2006. 7(7): 412-5.

38. Wolinsky FD, Unverzagt FW, Smith DM, **Jones RN**, Stoddard A, & Tennstedt SL. The ACTIVE cognitive training trial and health-related quality of life: Protection that lasts for 5 years. *Journals of Gerontology Series A: Biological Sciences and Medical Sciences*, 2006. 61(12): 1324-9.
39. Wolinsky FD, Unverzagt FW, Smith DM, **Jones RN**, Wright E, & Tennstedt SL. The effects of the ACTIVE cognitive training trial on clinically relevant declines in health-related quality of life. *The Journals of Gerontology: Psychological Sciences and Social Sciences*, 2006. 61(5): S281-7.
40. Inouye SK, Zhang Y, **Jones RN**, Kiely DK, Yang FM, & Marcantonio ER. Risk factors for delirium at discharge: Development and validation of a predictive model. *Archives of Internal Medicine*, 2007. 167(13): 1406.
41. Rudolph JL, **Jones RN**, Rasmussen L, Silverstein J, Inouye SK, & Marcantonio ER. Independent vascular and cognitive risk factors for postoperative delirium. *The American Journal of Medicine* 2007. 120(9): 807-13.
42. Yang FM & **Jones RN**. Center for Epidemiologic Studies—Depression Scale (CES-D) item response bias found with Mantel-Haenszel method successfully replicated using latent variable modeling. *Journal of Clinical Epidemiology*, 2007. 60: 1195-200.
43. Inouye SK, Zhang Y, **Jones RN**, Shi P, Cupples LA, Calderon HN, & Marcantonio ER. Risk factors for hospitalization among community-dwelling primary care older patients: Development and validation of a predictive model. *Medical Care*, 2008. 46(7): 726-31.
44. Leveille S, Kiel D, **Jones RN**, Roman A, Hannan M, Sorond F, Kang H, Samelson E, Gagnon M, Freeman M, & Lipsitz L. The MOBILIZE Boston Study: Design and methods of a prospective cohort study of novel risk factors for falls in an older population. *BMC Geriatrics*, 2008. 8(1): 16.
45. Marcantonio ER, Aneja J, **Jones RN**, Alsop DC, Fong TG, Crosby GJ, Culley DJ, Cupples L A, & Inouye SK. Maximizing clinical research participation in vulnerable older persons: Identification of barriers and motivators. *Journal of the American Geriatrics Society*, 2008. 56(8): 1522-7.
46. Martin L, Poss JW, Hirdes JP, **Jones RN**, Stones MJ, & Fries BE. Predictors of a new depression diagnosis among older adults admitted to complex continuing care: implications for the depression rating scale (DRS). *Age and Ageing*, 2008. 37: 51-6.
47. Samelson EJ, Kelsey JL, Kiel DP, Roman AM, Cupples LA, Freeman MB, **Jones RN**, Hannan MT, Leveille SG, Gagnon MM, & Lipsitz LA. Issues in conducting epidemiologic research in elders: Lessons from the MOBILIZE Boston Study. *American Journal of Epidemiology*, 2008. 168(12): 1444-51.
48. Selim M, **Jones RN**, Novak P, Zhao P, & Novak V. The effects of body mass index on cerebral blood flow velocity. *Clinical Autonomic Research*, 2008. 18(6): 331-8.
49. Sorond FA, Serrador J, **Jones RN**, Shaffer ML, & Lipsitz LA. The Sit-to-Stand Technique for the measurement of dynamic cerebral autoregulation. *Ultrasound in Medicine and Biology*, 2009. 35(1): 21-9.

50. Yang FM & **Jones RN**. Measurement differences in depression: Chronic health-related and sociodemographic effects in older Americans. *Psychosomatic Medicine*, 2008. 70(9): 993-1004.
51. Yang FM, Cazorla-Lancaster Y & **Jones RN**. Within group differences in depression among older Hispanics living in the United States. *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences*, 2008. 63(1): P27-32.
52. Yang FM, Inouye SK, Fearing MA, Kiely DK, Marcantonio EM, & **Jones RN**. Participation in activity and risk for incident delirium. *Journal of the American Geriatrics Society*, 2008. 56(8): 1479-84.
53. Zhang B, Mitchell SL, Bambauer KZ, **Jones RN**, & Prigerson HG. Depressive symptom trajectories and associated risks among bereaved Alzheimer disease caregivers. *Am J Geriatr Psych*, 2008. 16(2): 145.
54. Fong TG, Fearing MA, **Jones RN**, Shi P, Marcantonio ER, Rudolph JL., Yang FM, Kiely DK, & Inouye SK. The Telephone Interview for Cognitive Status: Creating a crosswalk with the Mini-Mental State Exam. *Alzheimers & Dementia*, 2009;5:492-7
55. Fong TG, **Jones RN**, Shi P, Marcantonio ER, Yap L, Rudolph JL, Yang FM, Kiely DK, & Inouye SK. Delirium accelerates cognitive decline in Alzheimer's disease. *Neurology*, 2009. 72(18): 1570-5.
56. Givens JL, **Jones RN**, & Inouye SK. The overlap syndrome of depression and delirium in older hospitalized patients. *Journal of the American Geriatrics Society*, 2009. 57(8): 1347.
57. Hajjar I, Yang F, Sorond F, **Jones RN**, Milberg B, Cupples AL, & Lipsitz LA. A novel aging phenotype of slow gait, impaired executive function and depressive symptoms: Relationship to blood pressure and other cardiovascular risks. *Journals of Gerontology. Series A, Biological Sciences and Medical Sciences*, 2009. 64(9): 994-1001.
58. **Jones RN**, Kiely Dan K , & Marcantonio Edward R. Prevalence of delirium on admission to post-acute care is associated with a higher number of nursing home deficiencies. *Journal of the American Medical Directors' Association*, 2009;11:253-6.
59. Kiely DK, Marcantonio ER, Inouye SK, Shaffer ML, Bergmann MA, Yang FM, Fearing M, & **Jones RN**. Persistent delirium predicts greater mortality. *Journal of the American Geriatrics Society*, 2009. 57: 55-61.
60. Leveille SG, **Jones RN**, Kiely DK, Hausdorff JM, Shmerling RH, Guralnik JM, Kiel DP, Lipsitz LA, & Bean JF. Chronic musculoskeletal pain and the occurrence of falls in an older population. *JAMA*, 2009. 302(20): 2214-21.
61. Mitchell SL, Teno JM, Kiely DK, Shaffer ML, **Jones RN**, Prigerson HG, Volicer L, Givens JL, & Hamel MB. The clinical course of advanced dementia. *New England Journal of Medicine*, 2009. 361: 1529-38.

62. Newman LR, Lown BA, **Jones RN**, Johansson A, & Schwartzstein RM. Developing a peer assessment of lecturing instrument: Lessons learned. *Academic Medicine*, 2009. 84(8): 1104-10.
63. Rudolph JL, **Jones RN**, Levkoff SE, Rockett C, Inouye SK, Selke FW, Khuri SF, Lipsitz LA, Ramlawi B, Levitsky S, & Marcantonio ER. Derivation and validation of a preoperative prediction rule for delirium after cardiac surgery. *Circulation*, 2009. 119: 229-36.
64. Teresi JA , Ocepek-Welikson K, Kleinman M, Eimicke JP, Crane PK, **Jones RN**, Lai J, Choi SW, Hays RD, Reeve BB, Reise SP, Pilkonis PA, & Cella D. Analysis of differential item functioning in the depression item bank from the Patient Reported Outcome Measurement Information System (PROMIS): An item response theory approach. *Psychology Science Quarterly*, 2009. 51(2): 148-80.
65. Tucker-Drob EM, Johnson KE, & **Jones RN**. The cognitive reserve hypothesis: A longitudinal examination of age-associated declines in reasoning and processing speed. *Developmental Psychology*, 2009. 45(2): 431-46.
66. Wolinsky FD, Mahncke HW, Weg MWV, Martin R, Unverzagt FW, Ball KK, **Jones RN**, & Tennstedt SL. The ACTIVE cognitive training interventions and the onset of and recovery from suspected clinical depression. *The Journals of Gerontology: Psychological Sciences*, 2009. 64B(5): 577-85.
67. Wolinsky FD, Vander Weg MW, Martin R, Unverzagt FW, Ball K, **Jones RN**, & Tennstedt SL. The effect of speed of processing training on depressive symptoms in ACTIVE. *Journal of Gerontology: Medical Sciences*, 2009. 64(4): 468-72.
68. Wolinsky F , Mahncke HW, Kosinski M, Unverzagt FW, Smith DM, **Jones RN** , Stoddard A, & Tennstedt SL. The ACTIVE cognitive training trial and predicted medical expenditures. *BMC Health Services Research*, 2009. 9(109 (29 June 2009)).
69. Yang FM, Marcantonio ER, Inouye SK, Kiely DK, Rudolph JL., Fearing M, & **Jones RN**. Phenomenological subtypes of delirium: Patterns, prevalence and prognosis. *Psychosomatics*, 2009. 50(3): 248-54.
70. Yang FM, Tommet D, & **Jones RN**. Disparities in self-reported geriatric depressive symptoms due to sociodemographic differences: An extension of the bi-factor item response theory model for use in differential item functioning. *Journal of Psychiatric Research*, 2009. 43(12): 1025-35.
71. Aiken Morgan AT, Marsiske M, Dzierzewski J, **Jones RN**, Whitfield KE, Johnson KE, & Cresci MK. Race-related cognitive test bias in the ACTIVE study: A MIMIC model approach. *Experimental Aging Research*, 2010. 36(4): 426-52.
72. Ayotte B, Yang F, & **Jones RN**. Physical health and depression: a dyadic study of chronic illness and depressive symptomatology in older adult couples. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 2010. 65B(4): 438-48.



73. Fong TG, **Jones RN**, Rudolph JL, Yang FM, Tommet D, Habtemariam D, Marcantonio ER, Langa KM, & Inouye SK. Development and validation of a brief cognitive assessment tool: The Sweet 16. *Archives of Internal Medicine* 2011;171:432-7.
74. Givens JL, **Jones RN**, Shaffer ML, Kiely DK, & Mitchell SL. Mental health and exposure to patient distress among families of nursing home residents with advanced dementia. *Journal of Pain and Symptom Management*, 2011;42:183-91.
75. Givens JL, **Jones RN**, Shaffer ML, Kiely DK, & Mitchell SL. Survival and comfort after treatment of pneumonia in advanced dementia. *Archives of Internal Medicine*, 2010. 170(13): 1102.
76. Hannan MT, Gagnon MM, Aneja JA, **Jones RN**, Cupples LA, Lipsitz LA, Samelson EJ, Leveille SG, & Kiel DP. Optimizing the tracking of falls in studies of older participants: Quarterly telephone recall compared to monthly falls calendars in the MOBILIZE Boston Study. *American Journal of Epidemiology*, 2010. 171(9): 1031-6.
77. Hayden KM, **Jones RN**, Zimmer C, Plassman BL, Browndyke JN, Pieper C, Warren LH, & Welsh-Bohmer KA. Factor structure of the National Alzheimer's Coordinating Centers Uniform Dataset neuropsychological battery: An evaluation of invariance between and within groups over time. *Alzheimer Disease & Associated Disorders* 2011;25:128-37.
78. **Jones RN**, Hirdes JP, Poss JW, Kelly M, Berg K, Fries BE, & Morris JN. Adjustment of nursing home quality indicators. *BMC Health Services Research*, 2010. 10(96).
79. Marcantonio ER, Bergmann MA, Kiely DK, Orav EJ, & **Jones RN**. Randomized trial of a delirium abatement program for postacute skilled nursing facilities. *Journal of the American Geriatrics Society*, 2010. 58(6): 1019-26.
80. O'Connor MG, Kapust LR, Lin B, Hollis AM, & **Jones RN**. The 4Cs (Crash History, Family Concerns, Clinical Condition, and Cognitive Functions): A Screening Tool for the Evaluation of the At Risk Driver. *Journal of the American Geriatrics Society*, 2010. 58(6): 1104-8.
81. Rudolph JL, Inouye SK, **Jones RN**, Yang FM, Fong TG, Levkoff SE, & Marcantonio ER. Delirium: An independent predictor of functional decline after cardiac surgery. *Journal of the American Geriatrics Society*, 2010. 58(4): 643-9.
82. Rudolph JL, Zanin NM, **Jones RN**, Marcantonio ER, Fong TG, Yang FM, Yap L, & Inouye SK. Hospitalization in community-dwelling persons with Alzheimer's disease: Frequency and causes. *Journal of the American Geriatrics Society*, 2010. 58: 1542-8.
83. Wolinsky FD, Mahncke HW, Vander Weg MW, Martin R, Unverzagt Frederick W., Ball KK, **Jones RN**, & Tennstedt SL. Speed of processing training protects self-rated health in older adults: Enduring effects observed in the multisite ACTIVE randomized controlled trial. *International Psychogeriatrics*, 2010. 22(3): 470-8.
84. Yen YC, Rebok GW, Gallo JJ, **Jones RN**, & Tennstedt SL. Depressive symptoms impair everyday problem solving ability through cognitive abilities in late life. *American Journal of Geriatric Psychiatry*, 2011;19:142-50.

85. **Jones RN**, Rudolph J, Inouye S, Yang F, Fong T, Milberg W, Tommet D, Metzger E, Adrienne C, Marcantonio E. Development of a unidimensional composite measure of neuropsychological functioning in older cardiac surgery patients with good measurement precision. *Journal of Clinical and Experimental Neuropsychology* 2010;32:1049-51.
86. Gangavati A, Hajjar I, Quach L, **Jones RN**, Kiely DK, Gagnon P, & Lipsitz LA. Hypertension, Orthostatic Hypotension, and the Risk of Falls in a Community Dwelling Elderly Population: The Maintenance of Balance, Independent Living, Intellect, and Zest in the Elderly of Boston Study. *Journal of the American Geriatrics Society*, 2011. 59(3): 383-9.
87. Jefferson AL, Gibbons LE, Rentz DM, Carvalho JO, Manly JJ, Bennett DA, **Jones RN**. A life course model of cognitive activities, socioeconomic status, education, reading ability, and cognition. *Journal of the American Geriatrics Society* 2011;59:1403-11.
88. Gibbons L, PK C, Mehta K, Pedraza O, Tang Y, Manly J, Narasimhalu K, Teresi J, **Jones RN**, Mungas D, Multiple, correlated covariates associated with differential item functioning (DIF): Accounting for language DIF when education levels differ across languages. *Ageing Research*, 2011. 2(1)
89. Hayden KM, Reed BR, Manly JJ, Tommet D, Pietrzak RH, Chelune GJ, Yang FM, Revell AJ, Bennett DA, **Jones RN**, Cognitive decline in the elderly: An analysis of population heterogeneity. *Age and Ageing*, 2011. 40(6): 684-9.
90. Quach L, Galica AM, **Jones RN**, Procter-Gray E, Manor B, Hannan MT, Lipsitz LA. The non-linear relationship between gait speed and falls: The MOBILIZE Boston Study. *Journal of the American Geriatrics Society* 2011;59:1069-73.
91. Berkowitz RE, **Jones RN**, Rieder R, Bryan M, Schreiber R, Verney S, Paasche Orlow MK. Improving disposition outcomes for patients in a geriatric skilled nursing facility. *Journal of the American Geriatrics Society* 2011;59:1130-6.
92. Eggermont LHP, Penninx BWJH, **Jones RN**, Leveille SG, Depressive symptoms, chronic pain, and falls in older community-dwelling adults: The Mobilize Boston Study. *Journal of the American Geriatrics Society*, 2012. 60(2): 230-237.
93. Unverzagt F, Guey L, **Jones RN**, Marsiske M, King J, Wadley V, Crowe M, Rebok G, Tennstedt S, Active cognitive training and rates of incident dementia. *Journal of the International Neuropsychological Society*, 2011. 18:1-9.
94. Yang FM, Heslin KC, Mehta KM, Yang C-W, Ocepek-Welikson K, Kleinman M, Morales LS, Hays RD, Stewart AL, Mungas D, **Jones RN**, Teresi J, A comparison of item response theory-based methods for examining differential item functioning on the object naming test by language of assessment among older Hispanics. *Psychological Test and Assessment Modeling*, 2011. 53(4): 440-460.
95. Brand C, Martin-Khan M, Wright O, **Jones RN**, Morris J, Travers C, Tropea J, Gray L. Development of quality indicators for monitoring outcomes of frail elderly hospitalised in acute care health settings: Study Protocol. *BMC Health Services Research* 2011;11:281.

96. Teresi JA, Ramirez M, **Jones RN**, Choi S, Crane PK. Modifying measures based on differential item functioning (DIF) impact analyses. *J Aging Health*. 2012;24(6):1044-76
97. Gross AL, Inouye SK, Rebok GW, Brandt J, Crane PK, Parisi JM, Tommet D, Bandeen-Roche K, Carlson MC, **Jones RN**. Parallel but not equivalent: challenges and solutions for repeated assessment of cognition over time. *Journal of Clinical and Experimental Neuropsychology*. 2012;34(7):758-72.
98. Gross AL, Rebok GW, Brandt J, Tommet D, Marsiske M, **Jones RN**. Modeling learning and memory using verbal learning tests: results from ACTIVE. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*. 2013;68(2):153-67
99. Saczynski J, Marcantonio ER, Inouye SK, Quach L, Fong T, Tommet D, Rudolph JL, Habtemariam D, **Jones RN**. Cognitive trajectories after post-operative delirium. *New England Journal of Medicine*. 2012;367(1):30-9.
100. Crane PK, Carle A, Gibbons LE, Insel P, Mackin RS, Gross A, **Jones RN**, Mukherjee S, Curtis SM, Harvey D, Weiner M, Mungas D, Alzheimer's Disease Neuroimaging I. Development and assessment of a composite score for memory in the Alzheimer's Disease Neuroimaging Initiative (ADNI). *Brain Imaging and Behavior*. 2012;6(4):502-16
101. Schmitt EM, Marcantonio ER, Alsup DC, Jones RN, Rogers SO, Jr., Fong TG, et al. Novel risk markers and long-term outcomes of delirium: the successful aging after elective surgery (SAGES) study design and methods. *J Am Med Dir Assoc*. 2012;13(9):818 e1-10
102. Gross AL, **Jones RN**, Habtemariam DA, Fong TG, Tommet D, Quach L, et al. Delirium and Long-term Cognitive Trajectory Among Persons With Dementia. *Arch Intern Med*. 2012;172(17):1324-31
103. **Jones RN**, Marsiske M, Ball K, Rebok G, Willis S, Morris JN, Tennstedt SL. The active cognitive training interventions and trajectories of performance among older adults. *Journal of Aging and Health*. 2012; in press.
104. Rebok GW, Langbaum JBS, **Jones RN**, Gross AL, Parisi JN, Spira AP, Kueider , Petras H, & Brandt J. Memory training in the ACTIVE study: How much is needed and who benefits? *Journal of Aging and Health*. 2012; in press
105. Yang FM, Grigorenko A, Tommet D, Farias ST, Mungas D, Bennett DA, **Jones RN**, Crane PK. AD pathology and cerebral infarctions are associated with memory and executive functioning one and five years before death. *J Clin Exp Neuropsychol*. 2013;35(1):24-34.
106. Carmichael O, McLaren DG, Tommet D, Mungas D, **Jones RN**, for the Alzheimer's Disease Neuroimaging I. Coevolution of brain structures in amnesic mild cognitive impairment. *Neuroimage*. 2012;66C:449-56.
107. Comart J, Mahler A, Schreiber R, Rockett C, **Jones RN**, Morris J. Palliative care for long term care residents: effect on clinical outcomes. *Gerontologist*. 2013;53(5):874-80.

108. Yang F, **Jones RN**, Inouye S, Tommet D, Crane P, Rudolph J, Ngo L, Marcantonio E. Selecting optimal screening items for delirium: an application of item response theory. *BMC Medical Research Methodology*. 2013;13(1):8.
109. Berkowitz RE, Fang Z, Helfand BKI, **Jones RN**, Schreiber R, Paasche-Orlow MK. Project ReEngineered Discharge (RED) Lowers Hospital Readmissions of Patients Discharged from a Skilled Nursing Facility *Journal of the American Medical Directors Association*. *JAMDA*. 2013;*in press*.
110. Templin TN, Hays RD, Gershon RC, Rothrock N, **Jones RN**, Teresi JA, Stewart A, Weech-Maldonado R, Wallace S. Introduction to patient-reported outcome item banks: issues in minority aging research. *Expert Review of Pharmacoeconomics & Outcomes Research*. 2013;13(2):183-6
111. Quach L, Yang FM, Berry SD, Newton E, **Jones RN**, Burr JA, et al. Depression, Antidepressants, and Falls Among Community-Dwelling Elderly People: The MOBILIZE Boston Study. *The Journals of Gerontology Series A: Biological Sciences and Medical Sciences*. 2013. *In press*
112. Kertesz SG, Holt CA, Steward JL, **Jones RN**, Roth DL, Stringfellow E, Gordon AJ, Kim TW, Austin EL, Henry SR, Johnson NK, Granstaff US, O'Connell JJ, Golden JF, Young AS, Davis LL, Pollio DE. Comparing homeless persons' care experiences in tailored versus nontailored primary care programs. *Am J Public Health*. 2013; published online ahead of print October 22, 2013:e1-e9. doi:10.2105/AJPH.2013.301481.
113. Saczynski J, Kosar C, Xu G, Puelle M, Schmitt E, **Jones RN**, Marcantonio E, Wong B, Isaza I, Inouye S. A tale of two methods: chart and interview methods for identifying delirium. *J Am Geriatr Soc*. 2013;*in press*.

#### OTHER PEER-REVIEWED PUBLICATIONS

1. Unverzagt FW, Smith SM, Rebok GW, Marsiske M, Morris JN, **Jones RN**, Willis SL, Ball K, King JW, Koepke KM, A Stoddard, & Tennstedt SL. The Indiana Alzheimer Disease Center's Symposium on Mild Cognitive Impairment. *Cognitive Training in Older Adults: Lessons from the ACTIVE Study*. *Current Alzheimer Research*, 2009. 6(4): 375-83.
2. **Jones RN**, Fong TG, Metzger E, Tulebaev S, Yang FM, Alsup DC, Marcantonio ER, Cupples LA, Gottlieb G, & Inouye SK. Aging, brain disease, and reserve: Implications for delirium. *American Journal of Geriatric Psychiatry*, 2010. 18(2): 117-27.
3. Liu S, **Jones RN**, & Glymour MM. Implications of lifecourse epidemiology for research on determinants of adult disease. *Public Health Reviews*, 2010. 32(2): 44.
4. **Jones RN**, Manly JJ, Glymour MM, Rentz DM, Jefferson AL, & Stern Y. Conceptual and measurement challenges in research on cognitive reserve. *Journal of the International Neuropsychological Society*, 2011;17:593-601.
5. Mungas D, Crane PK, Gibbons LE, Manly JJ, Glymour MM, **Jones RN**. Advanced psychometric analysis and the Alzheimer's Disease Neuroimaging Initiative: Reports from the 2011 Friday Harbor conference. *Brain Imaging Behav*. 2012;*in press*.

## BOOKS AND BOOK CHAPTERS

1. **Jones RN**. Data Analysis Issues, in Multidisciplinary Guidebook for Geriatric Research, Lipsitz L, Bernard M, Chernoff R, Connelly C, Evans L, Foreman M, Hanlon J, Kuchel G, Wieland D, & Studenski S, Editors. 2006, The Gerontological Society of America: Washington, DC. p. 63-87.
2. Newsom J, **Jones RN**, Hofer S (eds). Best Practices for Data Analysis of Longitudinal Studies on Aging: A Researcher's Guide. 2011. Routledge.
3. **Jones RN**. *Latent Growth Curve Models* (Chapter 9). In Newsom J, Jones RN, Hofer S (eds) Best Practices for Data Analysis of Longitudinal Studies on Aging: A Researcher's Guide. 2011. Routledge.
4. Teresi JA, **Jones RN**. Bias in psychological assessment and other measures (chapter 8), in APA handbook of testing and assessment in psychology: Volume 1. Test theory and testing and assessment in industrial and organizational psychology. Geisinger KF, Editor. 2013 (in press). American Psychological Association.

## ABSTRACTS

(Selected abstracts in the past 5 years, of a total of 45)

1. Crane PK, Gibbons L, Narasimhalu K, Pedraza O, Mehta K, Tang Y, Manly J, **Jones RN**, Mungas D. Accounting for differential item functioning in a measure of executive functioning improved the relationship with neuroimaging compared to standard scores. 10th International Conference on Alzheimer's Disease. Madrid, Spain; 2006.
2. Rudolph JL, **Jones RN**, Inouye SK, Marcantonio ER. Borderline cognitive impairment increases delirium risk in patients without dementia. Annual Scientific Conference of the American Geriatrics Society. Chicago; 2006. \* Presidential Poster Session; 2006
3. Yang FM, Heslin KC, Mehta KM, Yang C-W, **Jones RN**, Ocepek-Welickson K, Kleinman M, Morales LS, Hays RD, Stewart AL, Mungas D, Teresi J. Impact of language of assessment on estimates of object naming ability: an investigation of differential item functioning among older Hispanics. NIH Health Disparities Conference. Bethesda, MD; 2006.
4. Ayotte B, Yang F, **Jones RN**. Physical health and depression: A dyadic study of chronic conditions and depressive symptomatology in older adult couples. 60th Annual Scientific Conference of the American Geriatrics Society. San Francisco, CA; 2007.
5. Leveille SG, Hannan MT, Kiel D, **Jones RN**, Priplata A, Gagnon M, Freeman M, Roman A, Samelson E, Lipsitz LA. Pursuing the next frontier in risk factors for falls in the older population: The MOBILIZE Boston Study. 60th Annual Scientific Meeting of the Gerontological Society of America. San Francisco, CA; 2007.
6. Selim M, **Jones RN**, Novak P, Novak V. Gender differences in cerebral hemodynamics in patients with diabetes, hypertension, and stroke: A transcranial doppler ultrasound study. International Stroke Conference. San Francisco; 2007.
7. Yang F, **Jones RN**. Measurement differences in depression: Chronic health conditions and sociocultural effects in older Americans. Annual Meeting of the American Psychosomatic Society. Budapest, Hungary; 2007.

8. **Jones RN**, Yang FM. Depression in very old adults: A new measure in a new population based cohort of older adults. 61st Annual Scientific Meeting of the Gerontological Society of America; 2008 November 23; National Harbor, Maryland; 2008.
9. **Jones RN**, Yang F, Tommet D, Teresi J, Ocepek-Welikson K, Kleinman M, Crane P, Gibbons L. Some simulations of DIF detection. The Second PROMIS Conference. Bethesda, MD; 2008.
10. Leveille SG, Bean J, Schmerling R, **Jones RN**, Audette JF, Guralnik J, Kiel D. Chronic pain characteristics associated with risk factors for falls in the older population. 61st Annual Scientific Meeting of the Gerontological Society of America. National Harbor, Maryland; 2008.
11. Stavos K, Rudolph JL, **Jones RN**, Marcantonio ER. Delirium and the clinical assessment of attention in older adults. Annual Scientific Meeting of the American Geriatrics Society. Washington, DC; 2008. \* Presidential Poster Session; 2008
12. Leveille SG, Bean J, Schmerling R, **Jones RN**, Audette JF. Measuring pain in older adults: New considerations about the fifth vital sign. American Pain Society 28th Annual Scientific Conference. San Diego; 2009.
13. Reed B, Manly J, Tommet D, Hayden KM, Amann A, Pietrzak RH, Chelune GJ, **Jones RN**. Heterogeneous trajectories of cognitive decline in older adults: Relationships to Neuropathology. International Neuropsychological Society Annual Conference. Atlanta; 2009.
14. Rudolph JL, **Jones RN**, Inouye SK, Shi P, Marcantonio ER. Delirium and functional decline after cardiac surgery. Annual Scientific Meeting of the American Geriatrics Society. Chicago; 2009. \*Presidential Poster Session; 2009
15. Galica AM, **Jones RN**, Newton E, Sorond F, Iloputaife ID, Lipsitz LA. The effect of education on outdoor falls risk in an elderly population: Attenuating effect on vasoreactivity and gait speed. 3rd International Congress on Gait and Mental Function (GAIT 2010). Washington, DC; 2010.
16. Gangavati A, Hajjar I, Quach L, **Jones RN**, Kiely DK, Gagnon P, Lipsitz LA. Hypertension, orthostatic hypotension and the risk of falls in a community-dwelling elderly population: the MOBILIZE Boston Study. International Symposium on the Autonomic Nervous System. Marco Island, FL; 2010.
17. Jefferson AL, Gibbons L, Rentz DM, Carvalho JO, Manly J, Stern Y, Bennett DA, **Jones RN**. A life-course model of cognitive activities, socio-economic status, education, reading ability, and cognition. International Conference on Alzheimer's Disease. Honolulu, Hawaii; 2010.
18. Leveille SG, Hannan MT, Kiel D, **Jones RN**, Priplata A, Gagnon M, Freeman M, Roman A, Samelson E, Lipsitz LA. Pursuing the next frontier in risk factors for falls in the older population: The MOBILIZE Boston Study. Massachusetts Falls Prevention Coalition: Falls Prevention Symposium. Boston; 2010.
19. Marcantonio ER, Fong T, **Jones RN**, Rudolph JL, Yap L, Zanin N, Inouye SK. Hospitalization in community-dwelling persons with Alzheimer's Disease. Annual Scientific Meeting of the American Geriatrics Society. Orlando, FL: \* Presidential Poster Session; 2010.

20. Rudolph JL, Habtemariam D, Tommet D, **Jones RN**, Fong T, Yang FM, Marcantonio ER, Inouye SK. The effect of Memantine on hospitalization and delirium in Alzheimer's Disease. 23rd Annual Massachusetts Alzheimer's Disease Research Center & Boston Alzheimer's Disease Research Center Poster Symposium. Boston, MA; 2010.
21. Fong T, Huang L, Gross A, Inouye SK, Schmitt E, Habtemariam D, **Jones RN**. I can tell you how I'm doing: Self-report methods for detecting cognitive decline in older adults. 64th Annual Scientific Meeting of the Gerontological Society of America. Boston, MA; 2011.
22. Gross A, Habtemariam D, Tommet D, Inouye SK, **Jones RN**. Linking the unlinkable: Methods for equating non-equivalent cognitive tests. 64th Annual Scientific Meeting of the Gerontological Society of America. Boston, MA; 2011.
23. Lown BA, Carmody MA, **Jones RN**. Communication and caring in the clinic: A randomized educational intervention. Medical Education Day; 2011 October 25; Harvard Medical School: \* Medical Education Day Abstract Award; 2011.
24. Quach L, Yang F, Newton E, **Jones RN**, Burr JA, Lipsitz LA. Depression and falls among community-dwelling elderly: The MOBILIZE Boston Study. 64th Annual Scientific Meeting of the Gerontological Society of America. Boston, MA; 2011.
25. Saczynski J, Marcantonio ER, Quach L, Fong T, Tommet D, Rudolph JL, Habtemariam D, **Jones RN**. Modeling delirium and cognitive trajectories postoperatively: Acute decline and failure to recover. 64th Annual Scientific Meeting of the Gerontological Society of America. Boston, MA; 2011.
26. Yang FM, **Jones RN**, Inouye SK, Tommet D, Crane PK, Rudolph JL, Ngo L, Marcantonio ER. Delirium Screening Items Identified using a Modern Measurement Approach. 64th Annual Scientific Meeting of the Gerontological Society of America. Boston, MA; 2011.

## SCHOLARLY WORK PUBLISHED IN OTHER MEDIA

### NON-PEER-REVIEWED

#### Latent Variable Methods Workshop

This is a website designed to provide information on upcoming workshops, as well as distribute all slides, handouts, data, and syntax used in previous latent variable methods workshops. Every summer we hold a three day workshop providing an introduction to latent variable data analysis.

<https://sites.google.com/site/lvmworkshop/>

#### IFAR Workflow

This is a website devoted to distributing and discussing best practices for workflow in applied data analysis. Content is contributed by my working group at HSL/IFAR. We provide information on applied data analysis and workflow using Stata, R, Mplus, LaTeX, GraphViz, and other tools.

<https://sites.google.com/site/ifarwf/>

Phi Coefficient. Wikipedia entry. [http://en.wikipedia.org/wiki/phi\\_coefficient](http://en.wikipedia.org/wiki/phi_coefficient)

### runmplus

I wrote and published software for integrating (weaving) two statistical software packages: Stata (College Station, TX) and Mplus (Los Angeles, CA). The software is in the public domain (meaning it is freely distributed, not protected by copyright, and users may freely download, use, and modify). It is published in the Statistical Software Components (SSC) archive provided by the Research Papers in Economics (REPEC) archive at Boston College. The software is also distributed freely from my short course web site. I do not keep a record of users. The runmplus web page on my short course site has recorded 1,608 page views since the software was released in 2010. runmplus has an international user base. The software streamlines the estimation of complex models using Mplus by facilitating data preparation and by including an output interpreter. Used for focused applied data analysis and to perform simulation studies.

Jones, R. N. (2010). RUNMPLUS: Stata module to set up data for Mplus (Version S457154): Boston College Department of Economics. Retrieved from <http://ideas.repec.org/c/boc/bocode/s457154.html>

## INVITED PRESENTATIONS

### LOCAL

1. Applications of Modern Measurement in the Epidemiology of Aging / Invited Lecture Social Epidemiology Journal Club, Harvard School of Public Health, Department of Society, Health and Human Development (2006)
2. Latent Variable Modeling of Cognitive Reserve / Grand Rounds Beth Israel Deaconess Medical Center, Department of Medicine (2009)
3. Measurement and Methodology in Late Life Depression / Invited Lecture Harvard Medical School, Catalyst (2009)
4. Measurement Theory Considerations in Health Care Quality Assessment / Center for Gerontology and Healthcare Research, Brown University (2010)
5. Neuropsychological Profiles in Alzheimer's Disease and Cerebral Infarction: A Longitudinal MIMIC Model / Invited Lecture Harvard School of Public Health, Catalyst Biostatistics Seminar (2011)
6. Screening for Delirium: Applications of Item Response Theory in Deriving a New Tool / Invited Lecture (2011)
7. Anesthesia Grand Rounds, Brigham and Women's Hospital, Boston MA (2011)

### NATIONAL

1. Race/ethnicity and Late-Life Cognitive Function: A Study of Item Bias in the AHEAD Telephone Interview for Cognitive Status / Invited Lecture. University of Michigan, Institute for Social Research, Ann Arbor MI. 2001.



2. Applications of Psychometric Modeling in Research on Mental Health and Aging / Invited Lecture. Columbia University, Stroud Center for the Quality of Life. 2002.
3. Some approaches to longitudinal data analysis / Invited Pre-Conference Workshop. Gerontological Society of America, Boston MA. 2002.
4. Modern Measurement and the Assessment of Adult Cognitive Function / Invited Lecture. National Institutes of Health, National Institute on Aging, Intramural Research Program, Baltimore MD. 2003.
5. Applications of Item Response Theory in Aging Research / Invited Lecture. Yale Program on Aging and Claude D. Pepper Center for Older Americans Independence Center, New Haven CT. 2003.
6. Applications of Modern Measurement Techniques in Research on Mental Health and Aging / Invited Lecture. NIMH Advanced Center for Interventions and Services Research (ACISR): Depression and Aging, Department of Psychiatry, University of Pennsylvania, Philadelphia PA. 2004.
7. Unidimensionality: Issues and Implications in Applied Research / Invited Lecture. Advanced Psychometrics Workshop, University of Washington, Friday Harbor WA. 2004.
8. Longitudinal Data Analysis Using Mplus / Invited Lecture. Advanced Psychometrics Workshop, University of Washington, Friday Harbor WA. 2004.
9. Detecting Differential Item Functioning using Mplus/MIMIC Modeling / Invited Lecture. Advanced Psychometrics Workshop, University of Washington, Friday Harbor WA. 2004.
10. Approaches for Developing/Adapting Health-Related Concepts and Measures in Diverse Older Populations / Invited Lecture Pre-Conference Workshop. NIA Resource Centers for Minority Aging Research, Gerontological Society of America, Orlando FL. 2005.
11. IRT – Approaches to Measurement Using Mplus / Invited Lecture. Advanced Psychometrics Workshop, University of Washington, Friday Harbor WA. 2005.
12. Using the MIMIC Model to Detect Differential Item Functioning / Invited Lecture. Advanced Psychometrics Workshop, University of Washington, Friday Harbor WA. 2006.
13. Latent Growth Curve Models for Longitudinal Data Analysis using Mplus / Invited Lecture. Advanced Psychometrics Workshop, University of Washington, Friday Harbor WA. 2006.
14. Applications of Modern Measurement in the Epidemiology of Cognitive Aging / Invited Lecture. Cognitive Neuroscience Seminar, Taub Institute for Research on Alzheimer's Disease and the Aging Brain. Gertrude H. Sergievsky Center, Columbia University College of Physicians and Surgeons, New York. 2006.
15. Multivariate Models in Aging Research: An Mplus Primer / Invited Lecture. Yale University Program on Aging, New Haven CT. 2008.
16. Structural Equations Modeling Approach to Measurement Noninvariance and Differential Item Functioning Detection / Invited Lecture. University of Washington,

Quality of Life and Biobehavioral Cancer Prevention and Control Training Program, Seattle WA. 2009.

17. Latent Variable Modeling of Cognitive Reserve / Invited Lecture. Alzheimer's Disease Research Centers Core Directors Meeting, Baltimore MD. 2009.

18. Latent Variable Modeling of Cognitive Reserve / Invited Lecture. Advanced Psychometrics Workshop, University of Washington, Friday Harbor WA. 2009.

19. Screening for Delirium: Applications of Item Response Theory in Deriving a New Tool / Invited Lecture. University of Washington, Seattle WA. 2009.

20. Longitudinal DIF in Physical Function Items. Detection using Multiple Group Structural Equation Modeling / Invited Lecture. PROMIS Psychometrics Summit III, Chicago IL. 2010.

21. Impact of DIF in CAT: A Simulation Study using the PROMIS Depression Item Bank / Invited Lecture. PROMIS Psychometrics Summit IV, Airlie VA. 2011.

### INTERNATIONAL

1. An Overview of Structural Equation Modeling in Cognitive Aging Research / Pre-conference workshop (International Neuropsychological Society). 2011.

### GRANTS

#### Past

- 1997-2001      TLC Telephone System for Alzheimer's Family Caregivers (Mahoney, DF)  
U01AG013255  
Co-Investigator, Biostatistician  
The goal of this study was to evaluate a technology based intervention to support family caregivers of patients with Alzheimer's disease.
- 2000            Race, Ethnicity and Late-Life Cognitive Functioning (Jones, RN)  
R03 AG18690  
Principal Investigator (\$25,000)  
The aim of this proposal was to conduct an item response theory (IRT) based item bias evaluation of cognitive assessments of very old persons. Item bias analyses were conducted to test the null hypotheses that, while holding constant group differences in underlying cognitive ability, the cognitive test items are (a) free from bias according to race/ethnicity, and (b) free from bias according to level of educational attainment.
- 2000-2006     Trial to Reduce Delirium in Aged Post-Acute Patients (Marcantonio, ER)  
R01 AG017649  
Co-Investigator  
The goal of this study was to evaluate a cluster-randomized controlled trial for the amelioration of delirium among post-acute care patients.
- 2001-2006     PROGRAM HEAL - Activating the Lives of Older Adults (Morris, JN)  
R01 AG017931  
Co-Investigator  
The goal of this project was to evaluate an applied intervention to promote activity among nursing home residents using community volunteers.
- 2002-2011     Harvard Older Americans Independence Center (Lipsitz, LA)

P60 AG008812

Core Director, Biostatistics and Evaluation Core

The goal of this project was to support pilot and developmental studies on the physiology of falls and functional limitations among older adults.

- 2003-2006 ACTIVE Phase II: HRCA Field Site (Morris, JN)  
U01 NR004507  
Co-Investigator  
The goal of this study was to evaluate the effects of a randomized controlled trial of cognitive training programs for older adults at 5 years after intervention.
- 2003-2006 Evaluation of the Massachusetts Extended Care Career Ladder Initiative (Jones, RN)  
Commonwealth Corporation, Massachusetts  
Principal Investigator  
The goal of this study was to evaluate the impact of the Commonwealth Corporation's Extended Care Career Ladder Initiative using administrative data.
- 2003-2004 Aging and Course of Depressive Symptoms (Jones, RN)  
R03 AG021153  
Principal Investigator (\$100,000)  
The aim of this study was to evaluate age changes in depressive symptoms over a wide age range (50+) and to evaluate sex and race/ethnicity differences in depressive symptom trajectories.
- 2004-2009 The CASCADE Study: End-of-Life in Advanced Dementia (Mitchell, SL)  
R01 AG024091  
Co-Investigator  
The goal of this study was to describe the natural course and family decision making at the end-of-life for patients with advanced dementia.
- 2004-2010 HRCA/Harvard Research Nursing Home (Lipsitz, LA)  
P01 AG0004390  
Core Director, Data Management and Analysis Core  
The goal of this project was to mount a prospective community-based study of older persons and their experiences and risks for falls.
- 2005-2006 Delirium and Survival in Post-Acute Care (Jones, RN)  
R03 AG025262  
Principal Investigator (\$100,000)  
The aim of this study was to evaluate the impact of the occurrence of delirium among older patients admitted to post-acute care on risk of death.
- 2005-2009 Understanding Disparities in Mental Status Assessment (Jones, RN)  
R01 AG025308  
Principal Investigator (\$710,000)  
The goal of this study was to perform psychometric and statistical methods development for the detection of item bias, and to apply those tools to the detection of bias in the assessment of cognitive performance level across different race and ethnicity groups.
- 2006-2010 Improving the Quality of Care in Nursing Homes (Morris, JN)  
R01 NR009071  
Co-Investigator  
The goal of this project was to evaluate a focused effort to integrate quality indicator performance data into care practice modifications in Massachusetts nursing homes.
- 2007 Understanding Disparities in Mental Status Assessment – Supplement (Jones, RN)  
R01 AG025308-03S1  
Principal Investigator (\$67,000)  
The goal of this study was to extend methods and applied research for item bias detection

- to from mental status to depression.
- 2007-2010 Developing a Culturally- and Clinically-Sensitive Depression Instrument to Improve Screening Among Minority Older Adults with Cardiovascular Disease (Yang, PI)  
NARSAD Young Investigator Award  
This study examined measurement bias in widely used depression screening instruments. A major product of this research is an dynamic or adaptive test of the severity of depression capable of being administered by computer or paper-and-pencil, based on the PROMIS (NIH Roadmap Patient Reported Outcomes Measurement Information System) Depression item bank. My role is as mentor and co-investigator.
- 2008-2011 ACTIVE Phase III: HRCA Field Site (Morris, JN)  
U01 NR004507  
This is the 10-year follow-up of more than 3000 elders enrolled in a randomized controlled trial of three cognitive training interventions.
- 2007-2012 Improving Cognitive Outcome Precision and Responsiveness with Psychometrics (Crane, PK)  
R01 AG029672  
Co-Investigator  
This is a competing supplement to the Alzheimer's Neuroimaging Initiative. The goals are to improve psychometric test sensitivity to neuroimaging findings.

#### Current

- 2008-2013 Deriving and Validating a 3-Minute Diagnostic Assessment for Delirium (Marcantonio, ER)  
R01 AG030618  
Co-Investigator  
This is a project engaged in developing an improved screening tool for delirium. We are making use of modern measurement methods (e.g. item response theory).
- 2009-2013 Patient Reported Outcomes in Clinical Care of Patients with HIV (Crane, PK)  
U01 AR057954  
Co-Investigator  
This is a NIH Roadmap PROMIS (Patient Reported Outcomes Measurement Information System) project with the aim of developing and evaluating computerized adaptive testing of patient reported outcomes in an HIV clinic. My expertise in measurement bias detection has led to my being invited to lead analyses in PROMIS. The PROMIS initiative is developing standard, flexible, and dynamic assessment tools for the assessment of the outcomes of health care accessing the patient's perspective. My role is to evaluate methodologies to detect and assess the impact of measurement bias (differential item functioning) when responses are collected with dynamic (computerized adaptive) approaches.
- 2009-2013 Validation of PROMIS in Diverse Cancer Populations (Potosky, AL)  
U01 AR057971  
Co-Investigator (Consultant 2009-2011, Subcontract 2012-2013)  
The goals of this project are evaluate the Patient Reported Outcomes Measurement Information System (PROMIS) measures of depression, fatigue, physical function, and social function in cancer patients. This study will provide evidence about whether there are

differences in the measurements of these outcomes across different population groups. My role is to lead the analysis of measurement bias in the PROMIS domains. The research will provide data to inform changes to improve the measures and ultimately enable their wider use in health research.

- 2010-2015 Interdisciplinary Study of Delirium and its Long-Term Outcomes (Inouye, SK)  
P01 AG031720  
Project Leader  
This project, *The Role of Reserve in Delirium*, is part of a program project involving a prospective observational epidemiologic study of delirium among 500 surgical patients. This project concerns the role of reserve on the occurrence and consequences of delirium following elective surgery. The major aims of this study are to: (1) develop both a specific and a general index of reserve that reflect brain reserve and cognitive reserve, and (2) evaluate the independent contribution of reserve facets to the risk for incident delirium, and (3) evaluate the independent contribution of reserve facets to the long-term consequences of delirium.
- 2010-2015 Interdisciplinary Study of Delirium and its Long-Term Outcomes (Inouye, SK)  
P01 AG031720  
Core Director  
The *Data Management and Statistical Analysis Core* processes, prepares, and analyses data for the Delirium program project.
- 2008-2012 Conference on Advanced Psychometric Methods in Cognitive Aging Research (Mungas, D)  
R13 AG030995  
Co-Investigator  
This conference series is designed to promote the application of modern psychometric methods in research on cognitive decline associated with diseases of aging. I serve as an organizing committee member and as a faculty.

#### UNIVERSITY TEACHING ROLES

- 2003-2006 Clinical Epidemiology (AC701), Harvard Medical School, 8 first year medical students
- 2006-2013 Clinical Epidemiology and Population Health (AC511), Harvard Medical School, 8 first year medical students

#### HOSPITAL TEACHING ROLES

- 2001 Study Design for Observational and Intervention Research. Geriatrics fellows and gerontology post-docs, HSL/IFAR and BIDMC
- 2003, 2004 Everything You Need to Know about Epidemiology and Biostatistics in 40 Minutes or Less. Geriatrics fellows and gerontology post-docs, HSL/IFAR and BIDMC
- 2006-present Summer Workshop on Latent Variable Modeling in Aging Research. *Every summer since 2006 I lead a 3 day workshop on latent variable modeling. The didactic material is based in aging research, but the international audience includes*

*students, post-docs and faculty from diverse fields (medicine, psychology, sociology, statistics).The workshop focus alternates between measurement models (e.g., factor analysis) and longitudinal data analysis. Workshop materials are freely distributed via the world wide web (see Professional educational materials or reports, in print or other media). This course is the vehicle for methodological measurement training for post-doctoral fellows in the Columbia University Resource Centers for Minority Aging Research (RCMAR) program project (Jeanne Teresi, EdD, PI of Measurement Core). Attendance has grown on average about 3 participants per year since 2006, and to date we have trained 147 graduate students.*

#### PEER REVIEWER FOR MEDICAL JOURNALS

Age & Ageing  
Alzheimer's & Dementia  
American Journal of Epidemiology  
American Journal of Geriatric Psychiatry  
Archives of Gerontology and Geriatrics  
Brain  
Canadian Journal on Aging  
Clinical Nutrition  
Dementia and Geriatric Cognitive Disorders  
European Journal of Neurology  
Health Related Quality of Life  
International Psychogeriatrics  
Journal of Applied Gerontology  
Journal of the American Geriatrics Society  
Journal of the American Medical Association  
Journal of Alzheimer's Disease  
Journal of Bone and Mineral Research  
Journal of Epidemiology and Community Health  
Journal of General Internal Medicine  
Journal of the International Neuropsychological Society  
Journals of Gerontology: Medical Sciences  
Journals of Gerontology: Social Sciences  
Learning and Individual Differences  
Medical Care  
Psychology and Aging  
Psychological Assessment  
Quality of Life Research